DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024143 Address: 333 Burma Road **Date Inspected:** 26-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. SHI LIE **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG Segment**

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding of Base Metal Repair weld (groove prepared area) near the deck plate to deck plate transverse splice weld joint located on 12CW+13AW. The welder is identified as 067572. ZPMC QC Mr. HU MEI GANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2861. See the attached picture.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the edge plate to side plate hold back weld joint located on 13CE at cross beam side. The weld is designated as CA3014A-102. The welder is identified as 066258. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

WPS-B-P-2214-TC-U4b-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the edge plate to side plate hold back weld joint located on 14E at cross beam side. The weld is designated as SEG3019AL-294. The welder is identified as 066258. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2214-TC-U4b-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the vertical plate to I-rib stiffener hold back weld joint located on 13CE at bike path side. The weld is designated as VP3007-001-011. The welder is identified as 070007. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2214- TC-U4b-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Fillet welds joining the longitudinal shear plate to I rib stiffener hold back weld joint located on 14E at bike path side. The weld is designated as LD3041-001-403. The welder is identified as 037723. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2114-FCM-1.

During the random visual inspection of welds located on Segment 13AW at cross beam side, this Quality Assurance Inspector (QA) observed that ZMPC personnel performed grinding on temporary attachment removal area near side plate to bottom plate hold back weld. During the visual inspection this Quality Assurance Inspector (QA) found base metal damage from gouging the temporary attachment removal. The ZPMC QC is identified as Mr. ZHOU PENG. QA inform to ZPMC QC that prior to the repair welding, to follow up the repair with CWR-2969 and ensure with VT and MT all defect have been removed. See the attached picture.

ABF Quality Assurance (QA) personnel performing Ultrasonic Testing (UT) for the deck plate to deck plate transverse splice weld joint located on 13AE+13BE. The weld is designated as OBE13-002.

ABF Quality Assurance (QA) personnel performing Ultrasonic Testing (UT) for the deck plate to deck plate transverse splice weld joint located on 13AW+13BW. The weld is designated as OBW13-001.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)





Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer